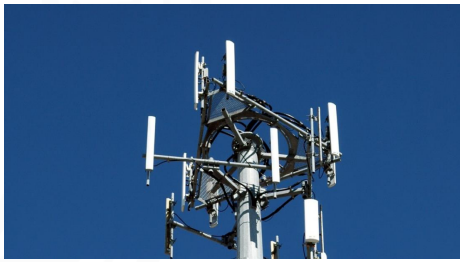
Centrally Valued Properties



ARIZONA DEPARTMENT OF REVENUE
PUBLIC TRUST
EXCELLENCE
TEAMWORK
SERVICE

CVP

- **904 Taxpayers / 4 Appraisers.**
- **2018 Full Cash Value $39.8 Billion.**

CVP Producing Oil and Gas Geothermal Interests

- 2018- Two Producing Wells in Arizona
- 2018 Full Cash Value Near $6.8 Million.

http://www.publicdomainpictures.net/view-image.php?image=110241&picture=oil-derrick-scene

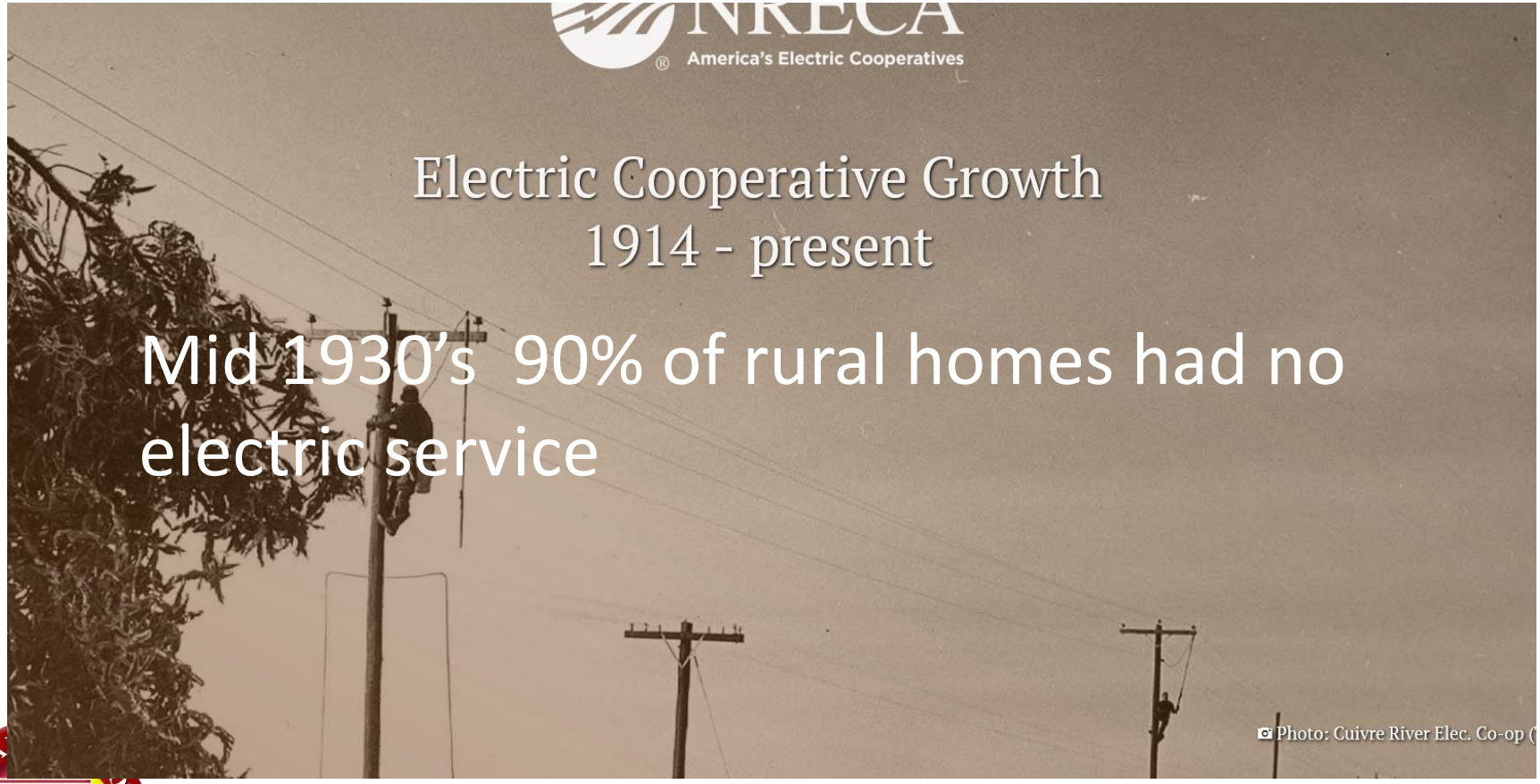
CVP PRIVATE RAILCARS

CVP PRIVATE RAILCARS

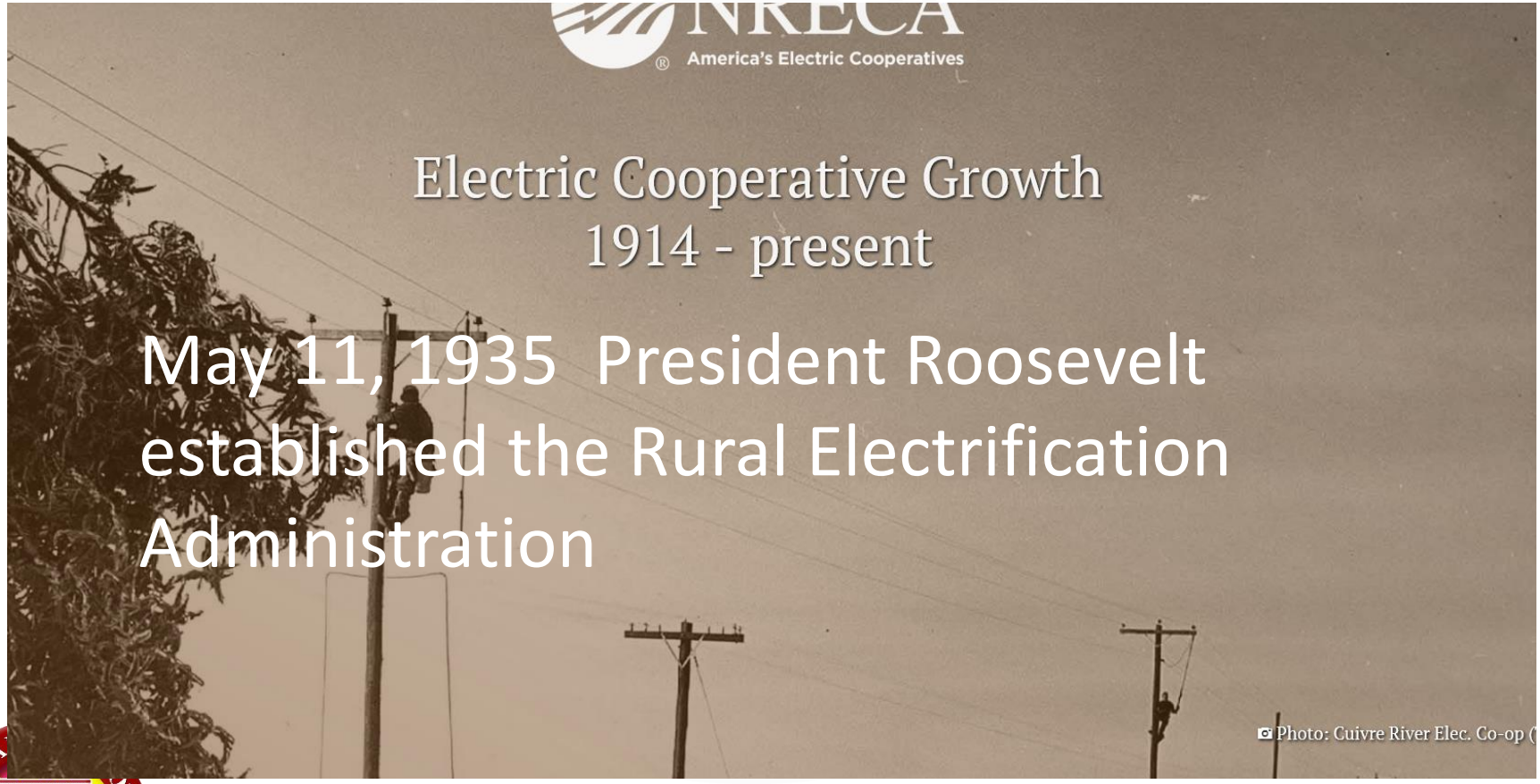
- Over 250+ Filers
- This year's values total over $110 M +
- DOR handles billing and tax collection for Private Rail Car Companies and Airlines
- Taxes collected from Private Rail Cars are deposited in the State General Fund.

CVP ELECTRIC DISTRIBUTION COOPERATIVES

CVP ELECTRIC DISTRIBUTION COOPERATIVES



CVP ELECTRIC DISTRIBUTION COOPERATIVES

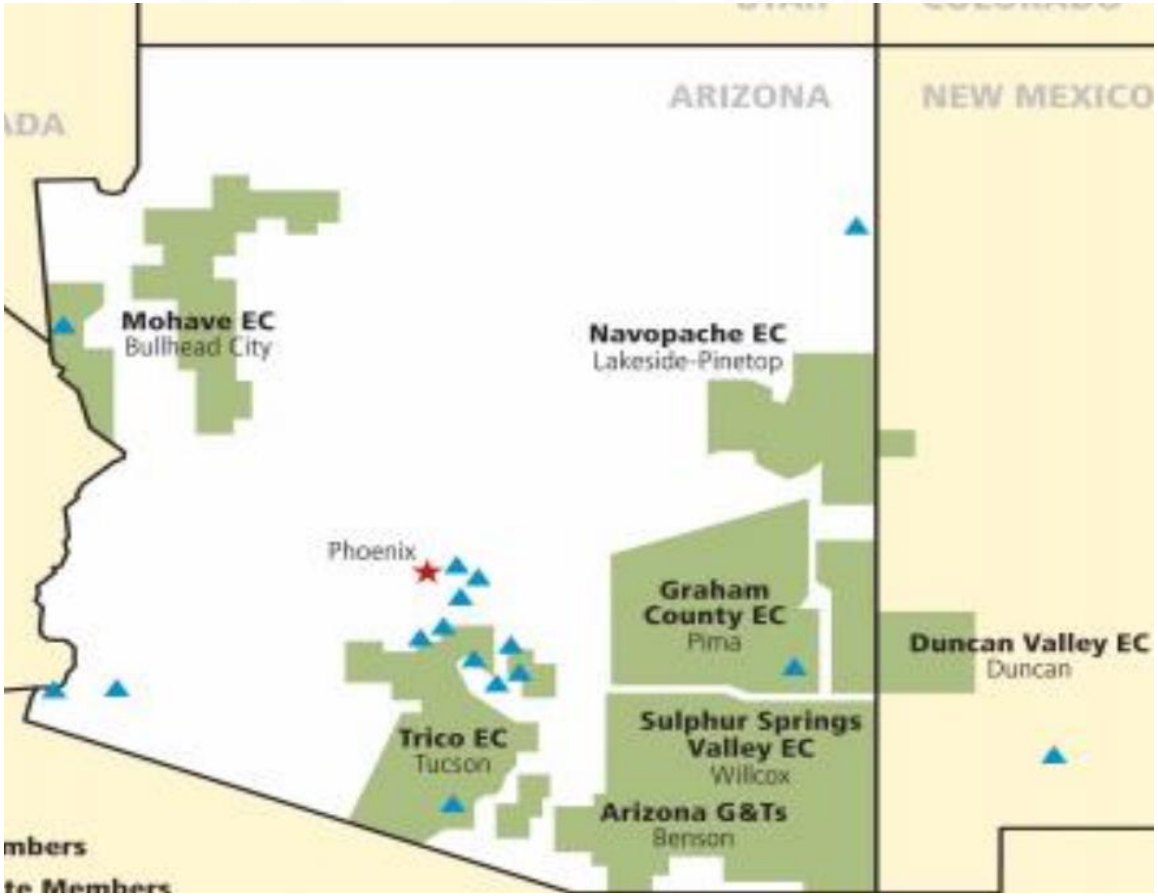


CVP ELECTRIC DISTRIBUTION COOPERATIVES

CVP ELECTRIC DISTRIBUTION COOPERATIVES

CVP ELECTRIC DISTRIBUTION COOPERATIVES

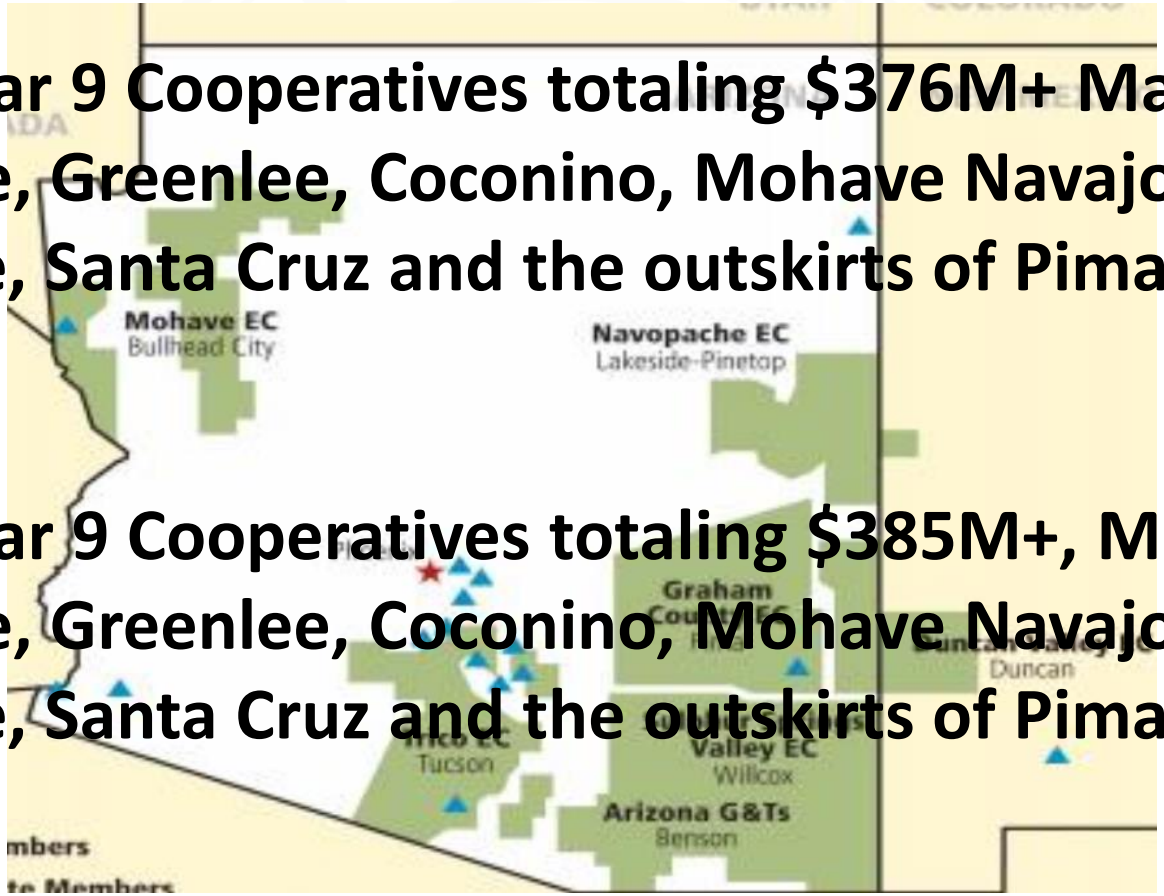
AZ CVP ELECTRIC DISTRIBUTION COOPERATIVES



CVP ELECTRIC DISTRIBUTION COOPERATIVES

Last year 9 Cooperatives totaling $376M+ Mainly in Cochise, Greenlee, Coconino, Mohave Navajo, Apache, Santa Cruz and the outskirts of Pima and Pinal

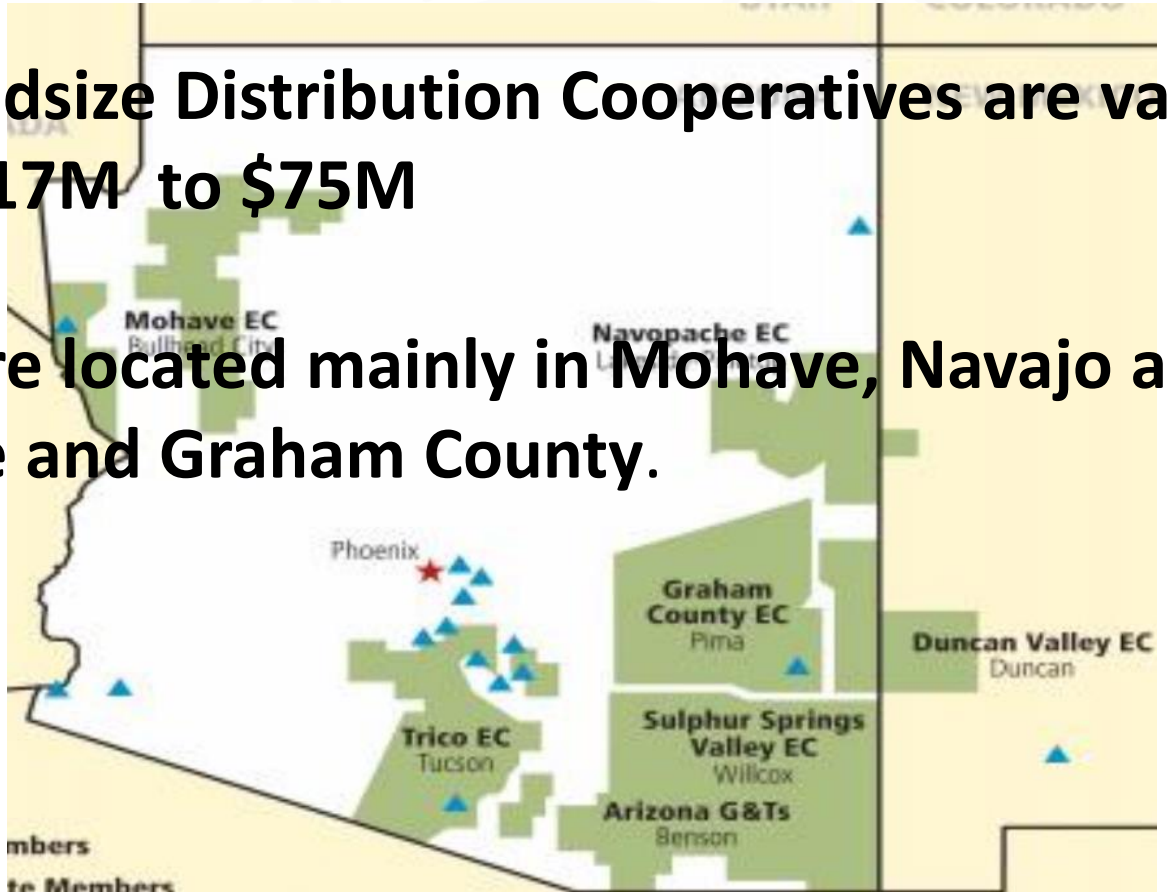
This year 9 Cooperatives totaling $385M+, Mainly in Cochise, Greenlee, Coconino, Mohave Navajo, Apache, Santa Cruz and the outskirts of Pima and Pinal



CVP ELECTRIC DISTRIBUTION COOPERATIVES

Two midsize Distribution Cooperatives are valued from $17M to $75M

They are located mainly in Mohave, Navajo and Apache and Graham County.

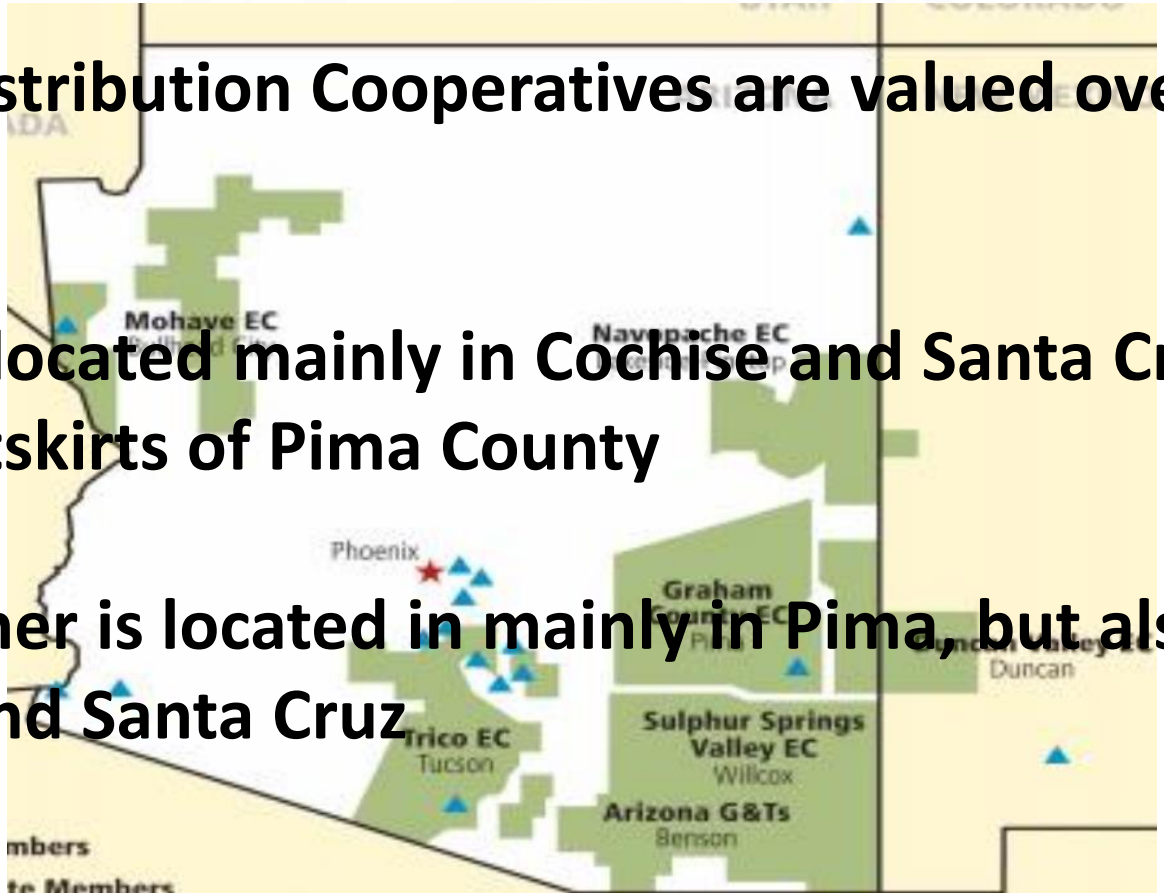


CVP ELECTRIC DISTRIBUTION COOPERATIVES

Two Distribution Cooperatives are valued over $100M

One is located mainly in Cochise and Santa Cruz and the outskirts of Pima County

The other is located in mainly in Pima, but also Pinal and Santa Cruz



AZ CVP ELECTRIC DISTRIBUTION COOPERATIVES

CVP AIRLINES

- This year's initial full cash values total $700M+
- 27 Airlines reported for TY 2018
- Two Airlines exceeding $200 M in full cash value
- Eight Airlines ranging from $10M to $56M
- Six Airlines ranging from $1M to $9M
- Ten Airlines under $1M in value

http://www.publicdomainpictures.net/view-image.php?image=16400&picture=airplane-landing

CVP AIRLINES

- This year's initial full cash values total $700M+
- DOR handles billing and tax collection for Private Rail Car Companies and Airlines.
- Taxes collected from Airlines are deposited in the State Aviation Fund.
- Three Appeals

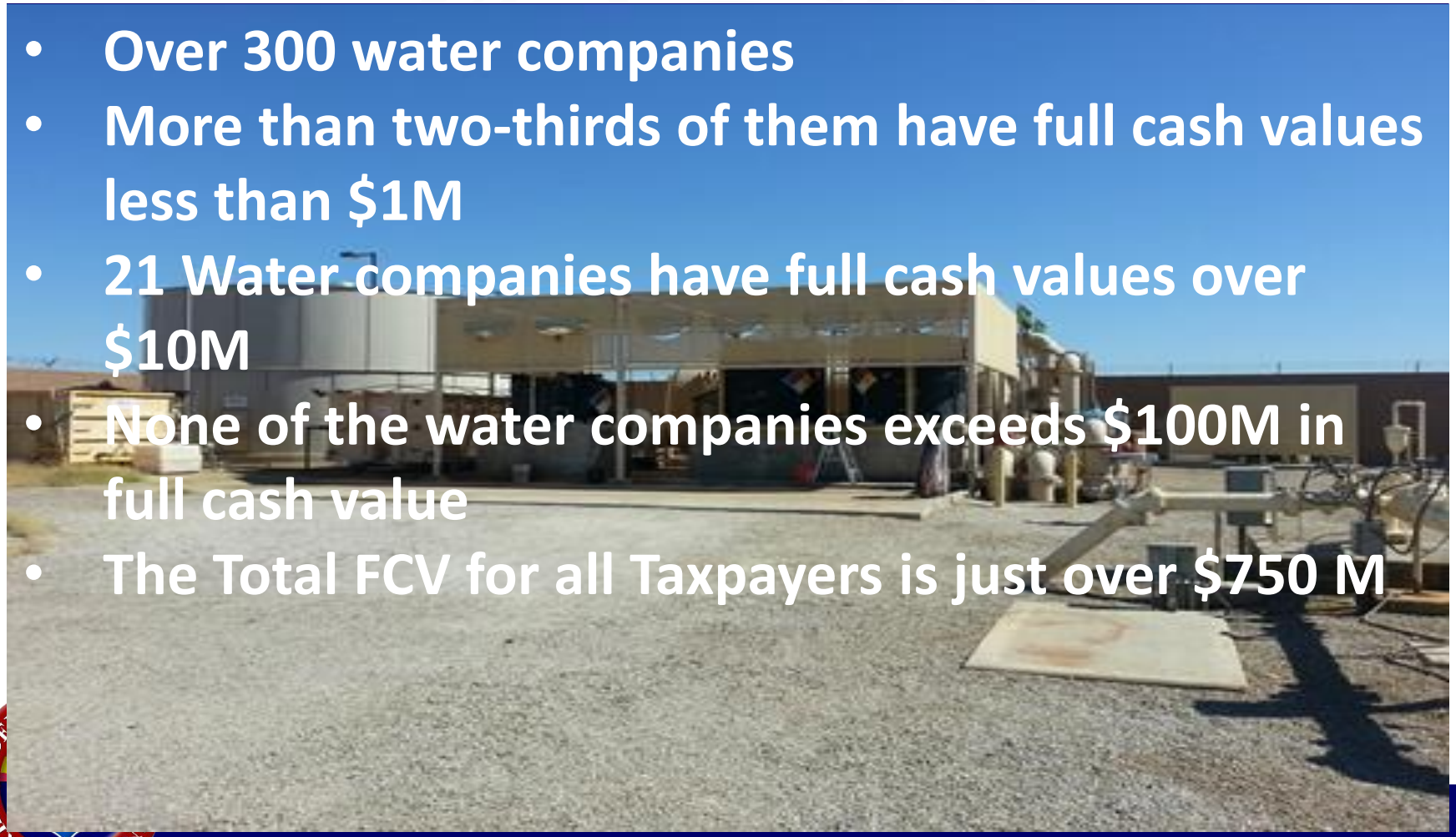
Flight Property Fun Facts

- Class 5 assessment ratio and the average state tax rate apply to flight property.
- The State Aviation Fund is administered by ADOT
- ADOR will collected approximately $10,000,000 from the airlines last year.

CVP WATER, SEWER AND WASTEWATER

CVP WATER, SEWER AND WASTEWATER

CVP WATER, SEWER AND WASTEWATER



- Over 300 water companies
- More than two-thirds of them have full cash values less than $1M
- 21 Water companies have full cash values over $10M
- None of the water companies exceeds $100M in full cash value
- The Total FCV for all Taxpayers is just over $750 M

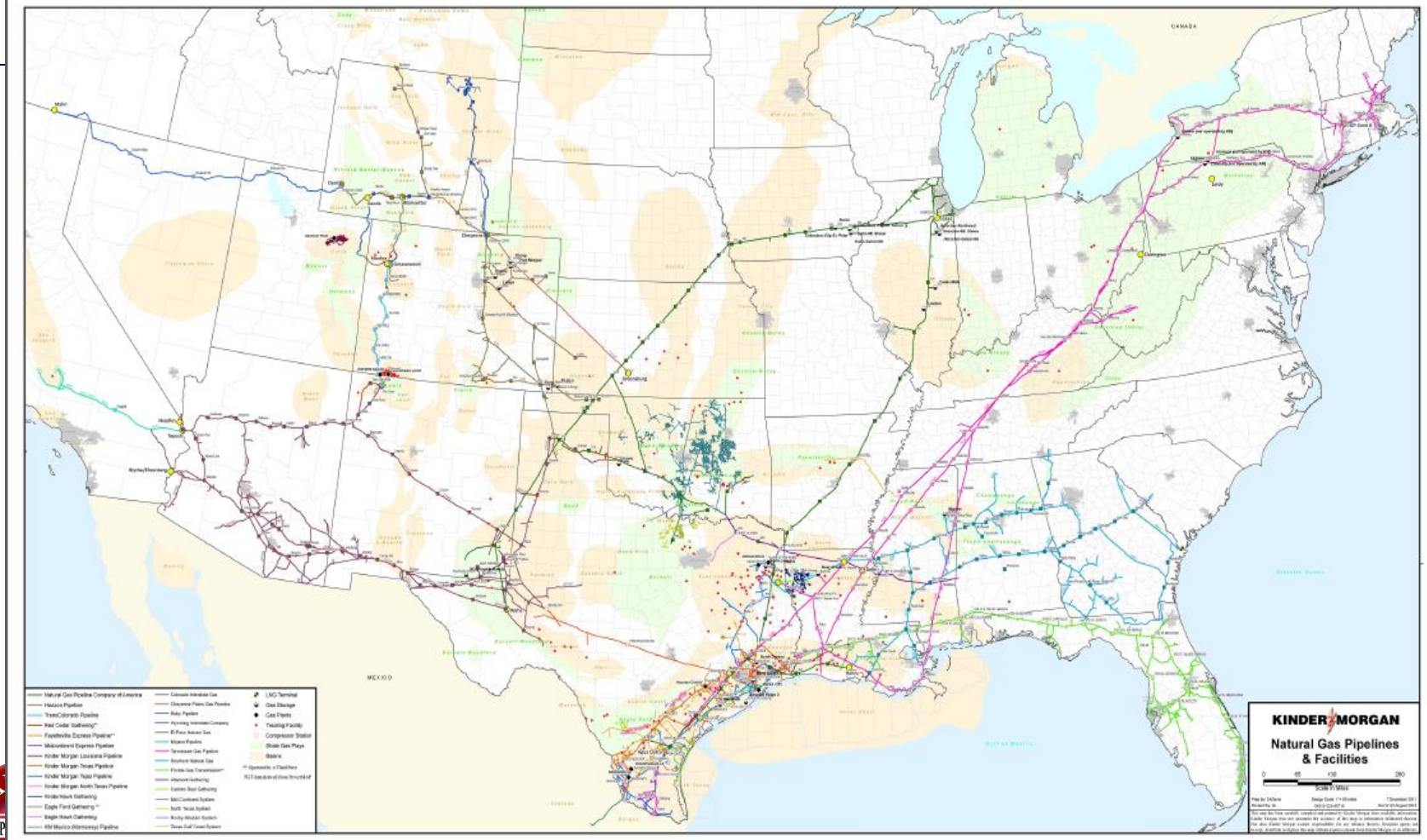
CVP RAILROADS

http://www.publicdomainpictures.net/view-image.php?image=170167&picture=railroad

CVP RAILROADS

- Last year, 12 Railroads totaled $1.4 Billion + located throughout the state.
- Two major railroads valued over $700M apiece.
- Two midsize railroads ranging from $35M to $65M.
- Five small railroads valued in the range from $2M to $7M.
- Three very small railroads valued under $1M.
- This year, 12 Railroads initially totaled $1.6B+ FCV.

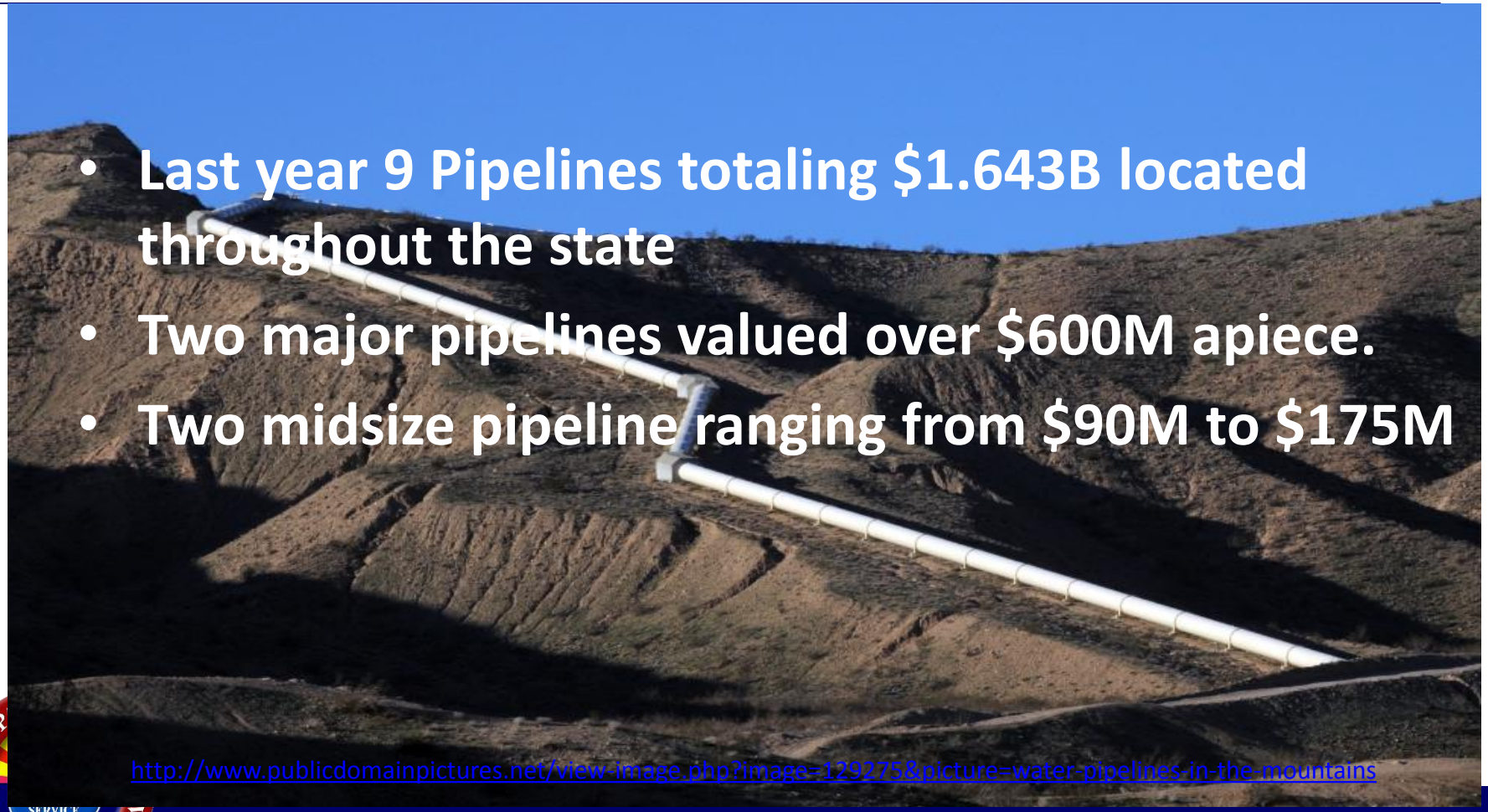
CVP PIPELINES



CVP PIPELINES

http://www.publicdomainpictures.net/view-image.php?image=88047&picture=wildflowers-and-pipeline

CVP PIPELINES



- Last year 9 Pipelines totaling $1.643B located throughout the state
- Two major pipelines valued over $600M apiece.
- Two midsize pipeline ranging from $90M to $175M

http://www.publicdomainpictures.net/view-image.php?image=129275&picture=water-pipelines-in-the-mountains

CVP PIPELINES

- **Last year 9 Pipelines totaling $1.643B**
- **This year 9 pipelines totaling $1.6B +**

CVP PIPELINES

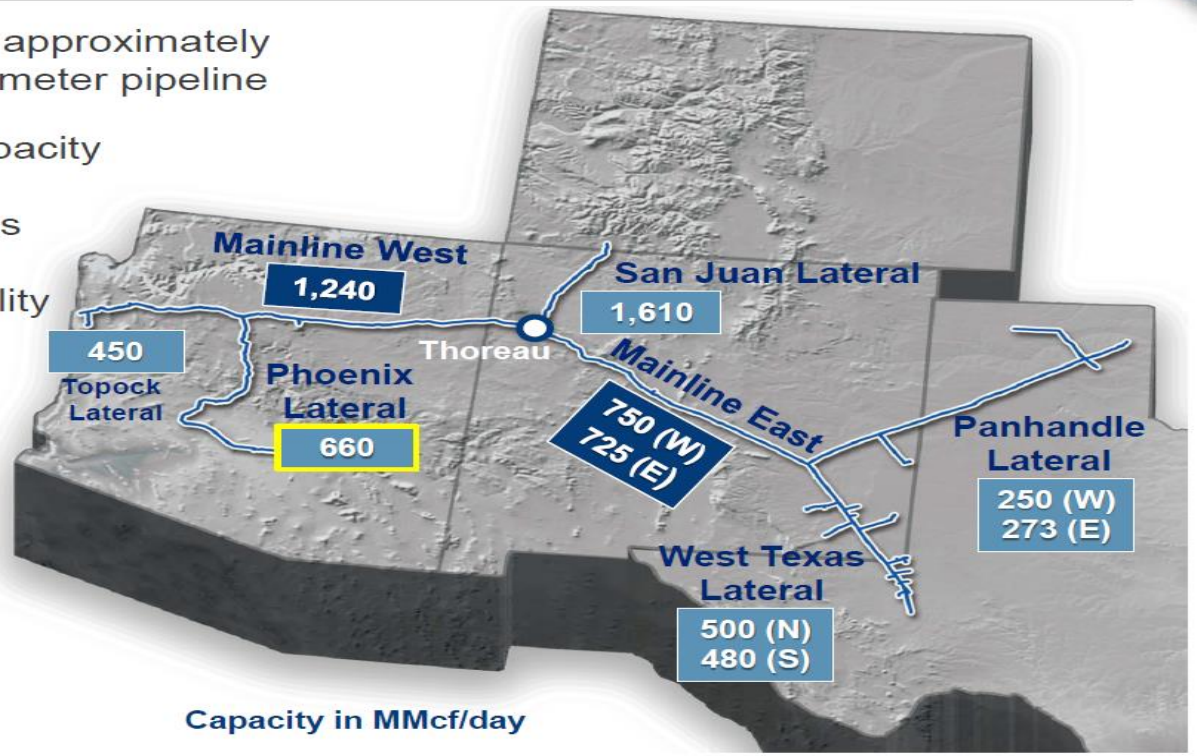
- This year 9 pipelines totaling $1.6B +
- Largest pipeline is locate in all 15 counties and the second largest is located in the Northern counties of Apache, Coconino, Mohave, Maricopa, Navajo, Pinal and Yavapai.
- One appeal

CVP PIPELINES

TRANSWESTERN PIPELINE SYSTEM OVERVIEW

The system consists of approximately 2,600 miles of large diameter pipeline

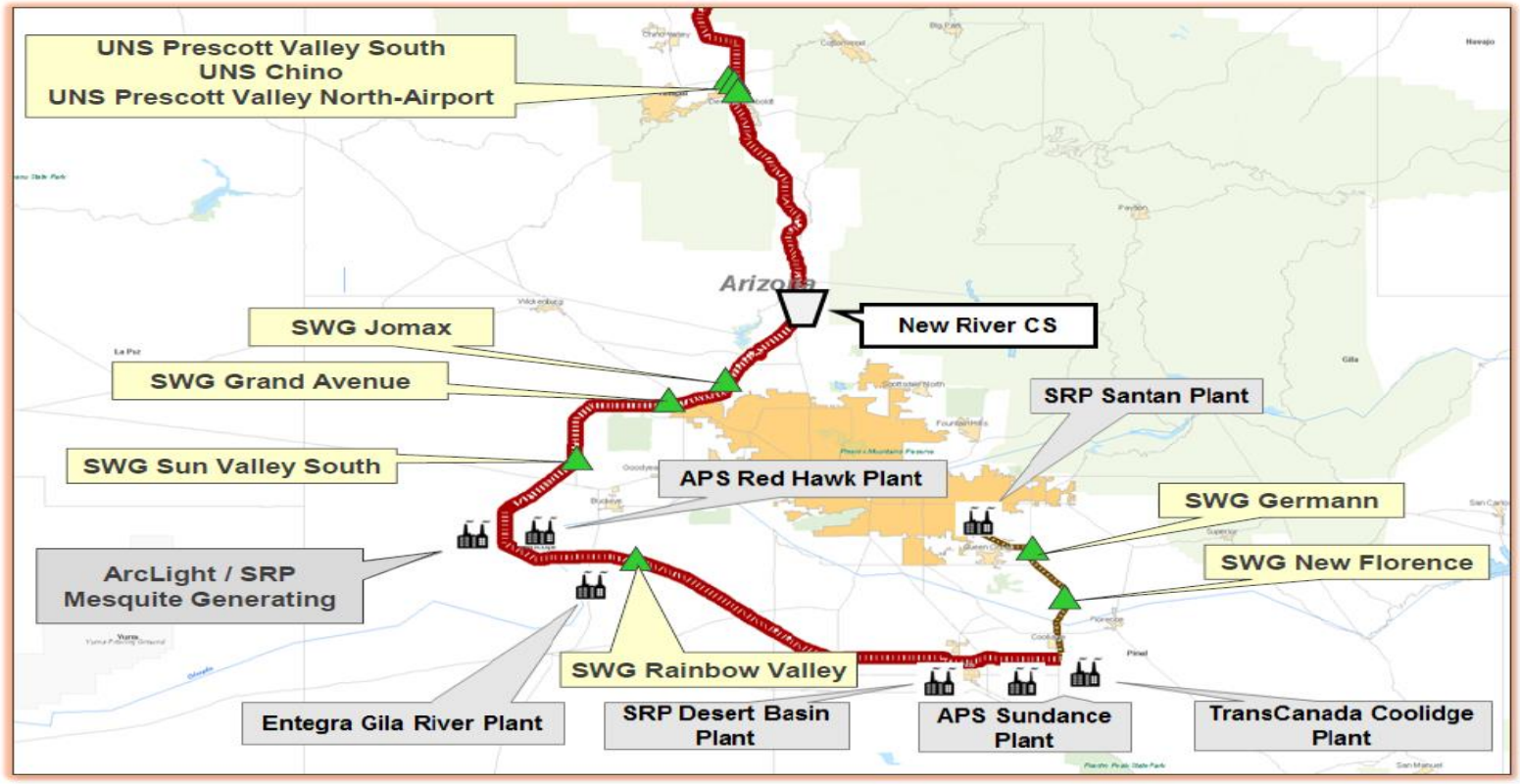
- ~ 2.1 Bcf/d delivery capacity
- ~ Multiple supply basins
- ~ Bi-directional Capability
- ~ 344,000 horsepower
- ~ 260 interconnects



3

CVP PIPELINES

TRANSWESTERN PHOENIX LATERAL



CVP INDEPENDENT POWER PRODUCERS

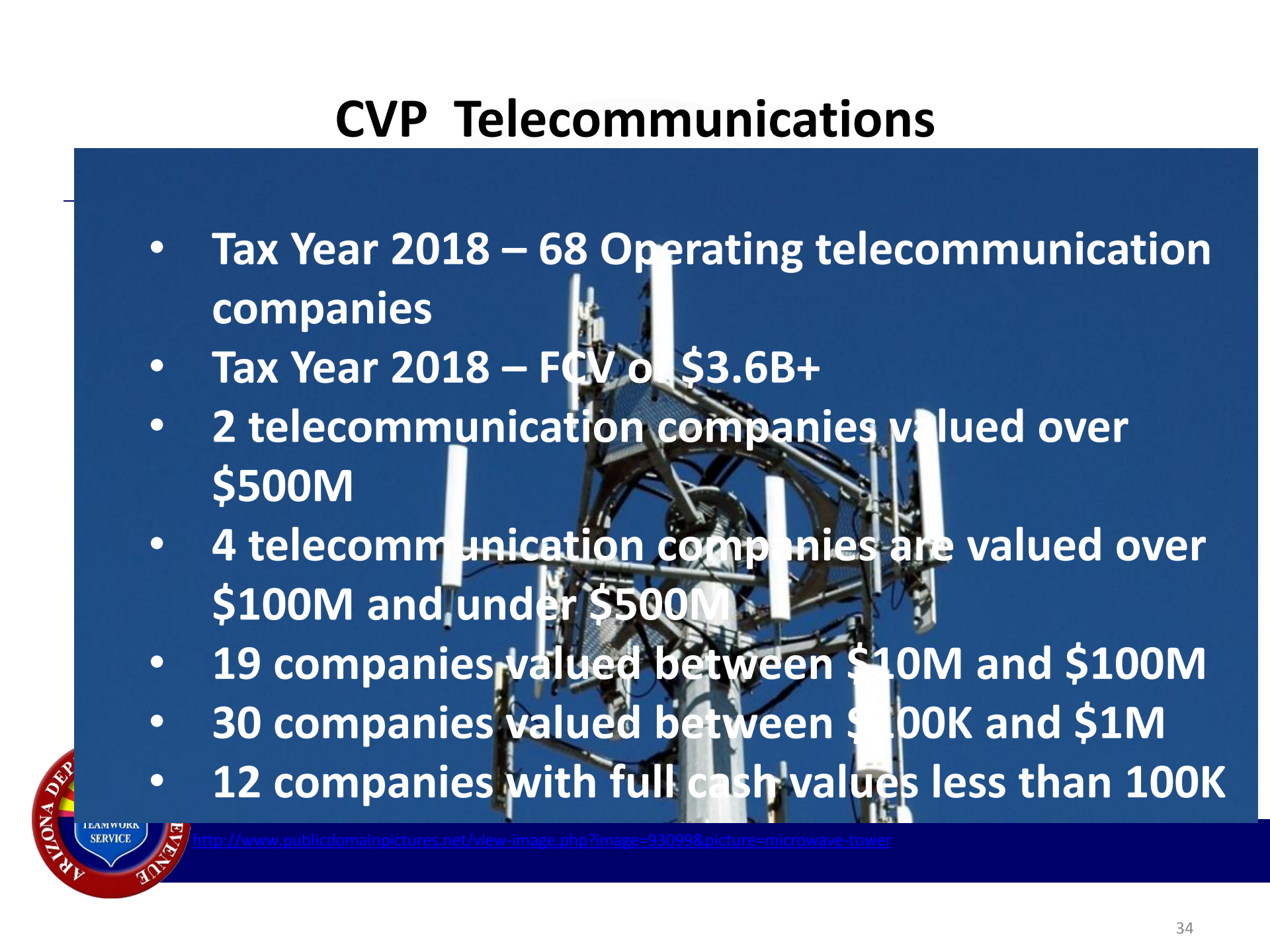
INDEPENDENT POWER PRODUCE

Last Year, 13 Independent power producers valued at $2,056,517,000 in TY 2017

This year, 9 independent power producers initially valued at $1.9B+ in TY 2018, but taxpayers are protesting values seeking to reduce the values to $1.1B

CVP Telecommunications

- Tax Year 2018 – 68 Operating telecommunication companies
- Tax Year 2018 – FCV of $3.6B+
- 2 telecommunication companies valued over $500M
- 4 telecommunication companies are valued over $100M and under $500M
- 19 companies valued between $10M and $100M
- 30 companies valued between $100K and $1M
- 12 companies with full cash values less than 100K



http://www.publicdomainpictures.net/view-image.php?image=93099&picture=microwave-tower

Telecommunications -- Issues Affecting their Valuation

- Cell Towers: When are they locally assessed vs. State assessed?
- How a merger/acquisition affects a Telecommunications property's valuation.
- How a company can split their operation so they can be valued both locally and as CVP.
- Overview of SB 1326 and how it will affect telecom FCVs.

CVP Mines

CVP Mines

CVP Mines

CVP Mines

CVP Mines

CVP Mines

CVP Mines

COUNTY	TAC's	FCV (TY 2017)
Cochise	3	$ 8,490,000
Coconino	1	521,569
Gila	15	323,202,469
Graham	2	466,962,000
Greenlee	3	2,189,233,000
Maricopa	3	16,063,800
Mohave	9	20,267,305
Navajo	1	59,250,000
Pima	10	640,800,000
Pinal	4	205,494,631
Yavapai	3	343,815,127
La Paz	1	6,946,000
TOTAL	55	$4,281,045,900

CVP Mines

MATERIAL	FCV (TY 2017)
Amethyst	$ 63,800
Chabazite	462,000
Coal	59,250,000
Copper	4,181,906,200
Gold	9,296,000
Oxygen	9,351,000
Perlite	1,140,000
Salt	16,000,000
Silica	1,387,900
Turquoise	1,053,000
Uranium	1,136,000
TOTAL	$4,281,045,900

CVP Mines

- Tax Year 2018 – 30 Operating Mines
- Tax Year 2018 – FCV of $4.2B+
- Seven mines valued over $100M and under $400M
- One mine valued in excess of $2B
- Balance valued under $50M

CVP Mines

- Quick Facts
- Arizona's only operating coal mine, Kayenta, on the Navajo and Hopi reservations, supplies the 7-to-8 million short tons burned annually by the Navajo Generating Station's three 750-megawatt units.

Last Updated: December 15, 2016 EIA (Energy Information Administration)

CVP ELECTRIC UTILITIES

Photo Courtesy of Salt River Project

CVP ELECTRIC UTILITIES

CVP ELECTRIC UTILITIES

CVP ELECTRIC UTILITIES

- Quick Facts
- Arizona's Palo Verde Nuclear Generating Station, rated at 3,937 net megawatts, is the largest net generator of electricity in the nation. By capacity, it is the second-largest power plant of any kind in the nation.
- Arizona ranked second in the nation in utility-scale electricity generation from solar energy in 2015.
- Arizona, the 14th most populous state, ranked 45th in the nation in per capita energy consumption in 2014, partly because of the state's small industrial sector.

Last Updated: December 15, 2016 EIA (Energy Information Administration)

CVP ELECTRIC UTILITIES

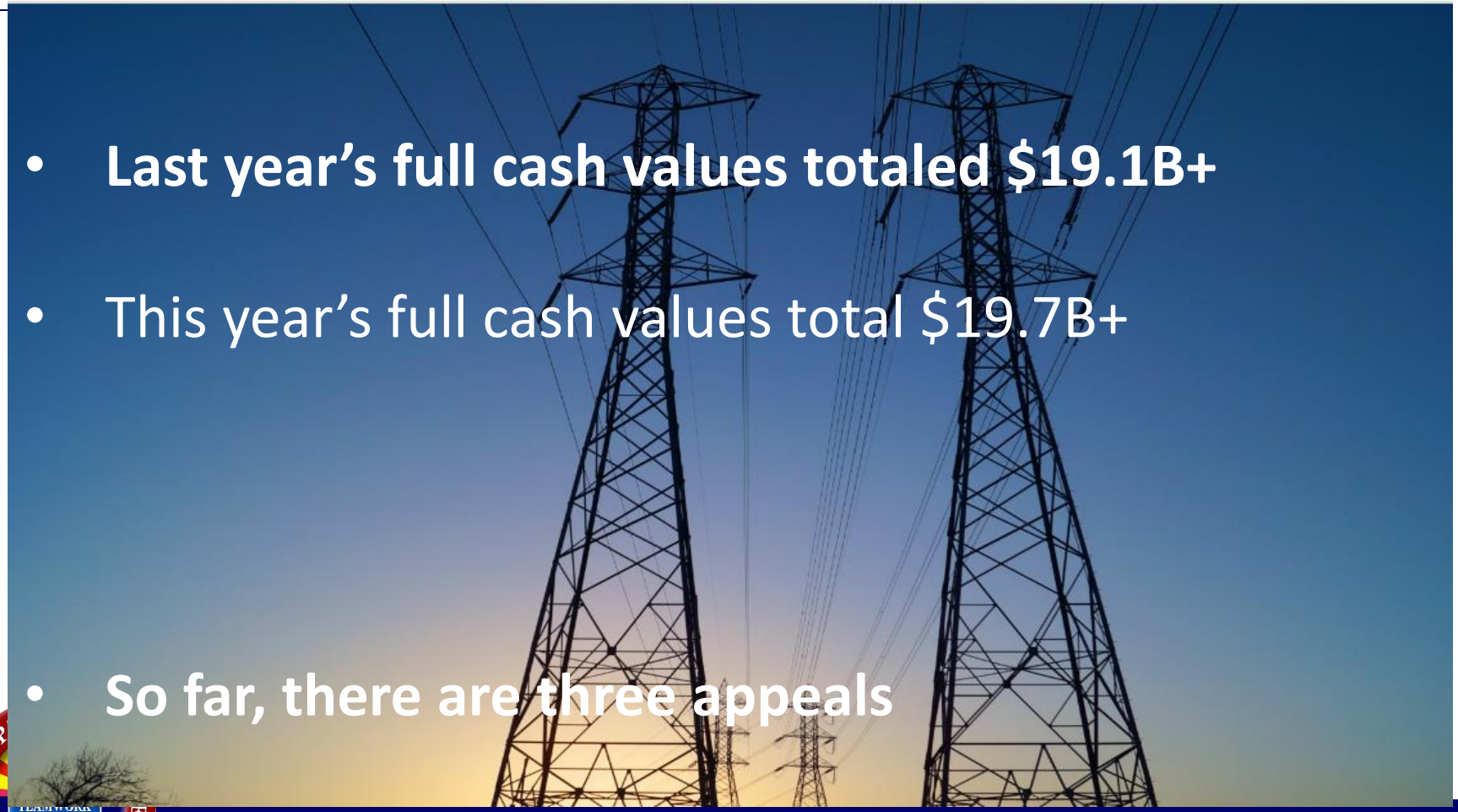
- **Quick Facts (Cont.)**
- **Arizona's Renewable Environmental Standard requires 15% of the state's electricity consumed in 2025 to come from renewable energy resources; in 2015, 9.5% of Arizona's utility-scale net electricity generation came from renewable resources, primarily from the Glen Canyon and Hoover Dams.** **Last Updated: December 15, 2016 EIA (Energy Information Administration)**

CVP ELECTRIC UTILITIES

- Three major Utilities
- Consists primarily of power plants, transmission lines, renewable equipment, CWIP and Environmental Protection Equipment
- Two of the Utilities pay property taxes, and the third makes payments in lieu of taxes.

http://www.publicdomainpictures.net/view-image.php?image=95061&picture=electrical-power-lines

CVP ELECTRIC UTILITIES



- **Last year's full cash values totaled $19.1B+**
- This year's full cash values total $19.7B+
- **So far, there are three appeals**

http://www.publicdomainpictures.net/view-image.php?image=95061&picture=electrical-power-lines

CVP RENEWABLE ENERGY INDUSTRY NEWS

FutureStructure

Cost of Building Power Plants, Wind and Solar Farms Drops

According to the U.S. Department of Energy, the costs fell significantly between 2013 and 2015.

BY RYAN MAYE HANDY, HOUSTON CHRONICLE / JULY 7, 2017

SHUTTERSTOCK

CVP RENEWABLE ENERGY INDUSTRY NEWS

Navajo Nation Entity Starts Solar Farm Amid Station Closing

A Navajo Nation entity has taken its first step toward generating electricity by starting a solar farm.

July 31, 2017, at 12:38 p.m.

AP

KAYENTA, Ariz. (AP) — A Navajo Nation entity has taken its first step toward generating electricity by starting a solar farm amid the pending closure of a coal-fired power plant in northeastern Arizona.

The Navajo Tribal Utility Authority recently started operating the 27.3-megawatt Kayenta Solar Project near Kayenta, Arizona, The Daily Times of Farmington, New Mexico, reports (https://goo.gl/kLBfCz).

It is the first large-scale solar energy facility on the reservation.

Solar farm project manager Glenn Steiger said the closing of the Navajo Generating Station is leaving a hole in power generation in the region. "And we know that part of that hole ultimately will be filled with renewable energy, whether it's solar or wind," Steiger said.

Navajo Nation President Russell Begaye recently signed a lease extension that will allow the Navajo Generating Station to continue operating through December 2019.

Best States

#1 Massachusetts
#2 New Hampshire
#3 Minnesota

CVP RENEWABLE ENERGY INDUSTRY NEWS

SHUTTERSTOCK

(TNS) — The cost of building natural gas-fired power plants, wind farms and large solar arrays has fallen significantly since 2013, according to the U.S. Department of Energy.

But the cost of building a new power plant — or utility-scale solar or wind farm — is one piece of the equation for power companies, which also consider the cost of fuel, financial incentives and state policies.

For instance, while the cost of fuel for natural gas plants is low and the cost of building those plants has dropped, low wholesale electricity prices and a surge of renewable energy in Texas have left companies hard-pressed to justify building, or even updating, power plants.

CVP RENEWABLE ENERGY INDUSTRY NEWS

Costs for installing natural gas generators at new and existing natural gas plants fell the most, by 28 percent, to an average $696 per kilowatt by 2015, which was the latest year for available data.

The costs for installing wind turbines was higher in 2015, at $1,661 per kilowatt, a 12 percent decrease from 2013. Larger wind farms, with above 100 megawatts, averaged lower installation costs than smaller farms.

Utility-scale photovoltaic generators are by far the most expensive to install, at $2,921 per kilowatt in 2015. Even so, those costs fell by 21 percent in 2015.

CVP RENEWABLE ENERGY INDUSTRY NEWS

TEP Plans Next-Generation Power Plant to Support Solar Energy Expansion

July 07, 2017 07:21 PM Eastern Daylight Time

TUCSON, Ariz.--(BUSINESS WIRE)--Tucson Electric Power (TEP) is seeking bids for the engineering, design and construction of an efficient new type of natural gas generator in Tucson that will help provide reliable electric service by supporting the expansion of renewable energy.

"The addition of these efficient natural gas resources will help us to preserve safe, reliable and affordable service for customers as our community continues to expand its reliance on renewable energy"

With a request for proposals (RFP) issued today, TEP is seeking a contractor to design and build a new facility that will house 10 flexible, fast-responding natural gas reciprocating internal combustion engines with a combined capacity of up to 200 megawatts (MW). TEP plans to bring half of the units online by mid-2019 and the remaining units into service by mid-2021.

The new power plant will be built near TEP's H. Wilson Sundt Generating Station on the company's 344-acre Irvington Campus,

CVP RENEWABLE ENERGY INDUSTRY NEWS

Reciprocating engines run efficiently and cost-effectively even while making abrupt and frequent adjustments to power output levels. They produce fewer emissions than traditional natural gas generating units and require minimal water for cooling. As the new units are brought into service, TEP plans to shut down two out of four steam generator units currently in operation at the Sundt Generating Station, reducing operating costs and improving the plant's emissions profile.

Nearly 11 percent of the power delivered last year to TEP's retail customers came from renewable resources. TEP is working to deliver at least 30 percent of its power from renewable resources by 2030, doubling the state's 2025 goal.

TEP has approximately 541 MW of total renewable generating capacity, enough to meet the annual electric needs of about 115,000 homes. This includes about 254 MW of community-scale solar systems and about 202 MW of private solar power systems.

CVP RENEWABLE ENERGY INDUSTRY NEWS

Renewable generation beats nuclear for two consecutive months

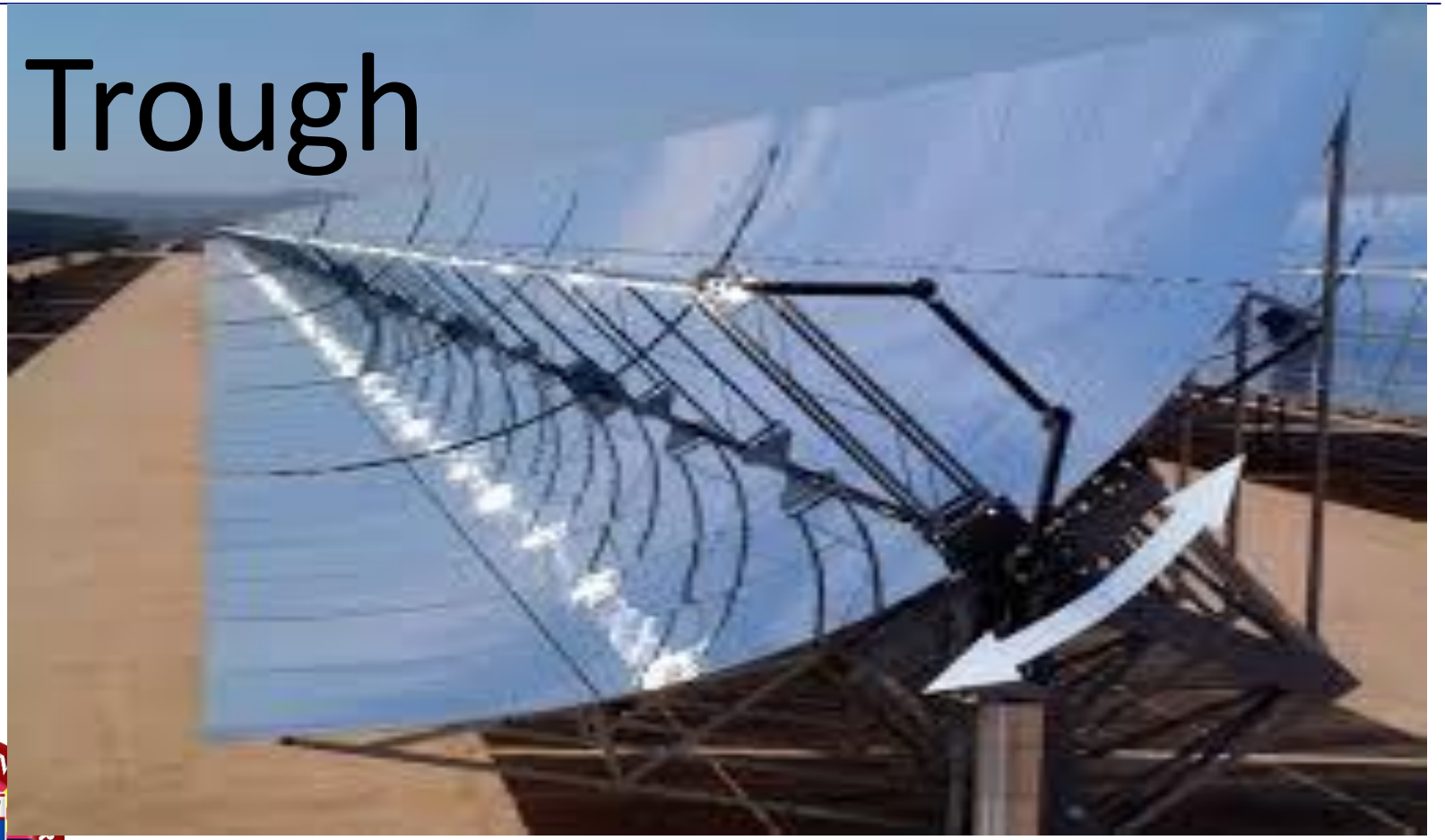
Lawrence Kim July 8, 2017 Share |

CVP RENEWABLE ENERGY

CVP RENEWABLE ENERGY

CVP RENEWABLE ENERGY

CVP RENEWABLE ENERGY



CVP RENEWABLE ENERGY

CVP ELECTRIC UTILITIES

CVP RENEWABLE ENERGY

- Last year 34 sites - FCV $1.2B+
- This year 41 sites - FCV Close to $1.3B

- Valued at 20% of Cost
- $1.3B ÷ 20% ≥ $6.5B

Solar Tracking Systems:

- Ground Mount
- Roof-Top
- Fixed Tilt
- Single Axis
- Dual Axis
- Trough
- Heliostats

Renewable Energy

- $6.5 B divided by $2.50 = 2,606,472,000 watts
- 2,606,472,000 watts divided by 1,000 = 2,606,472 Kilowatts
- 2,606,472 Kilowatts divided by 1,000 = 2,606 Megawatts

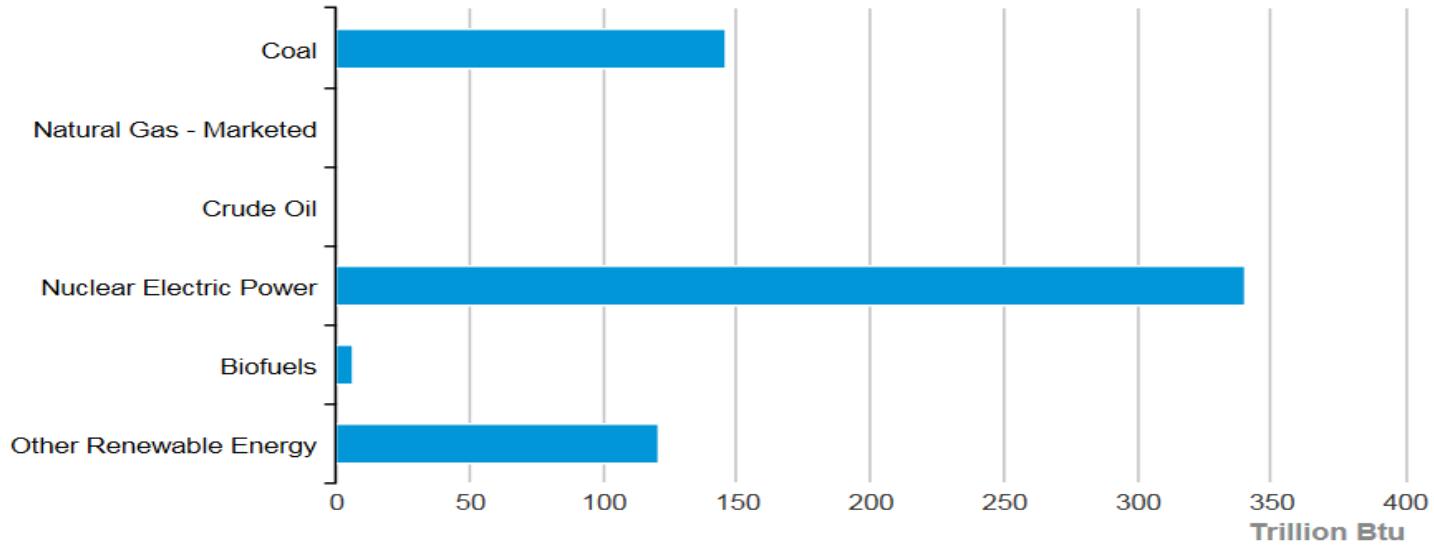
- By Comparison:
- Palo Verde is a 3,810 Megawatt facilities with three units with total construction cost of nearly $6,000,000,000
- Navajo Generating Plant is a 2,250 Megawatt facility from three units with total costs exceeding $1 billion dollars

Renewable Energy

Consumption by Source | Consumption by Sector | **Production** | Electricity | Prices

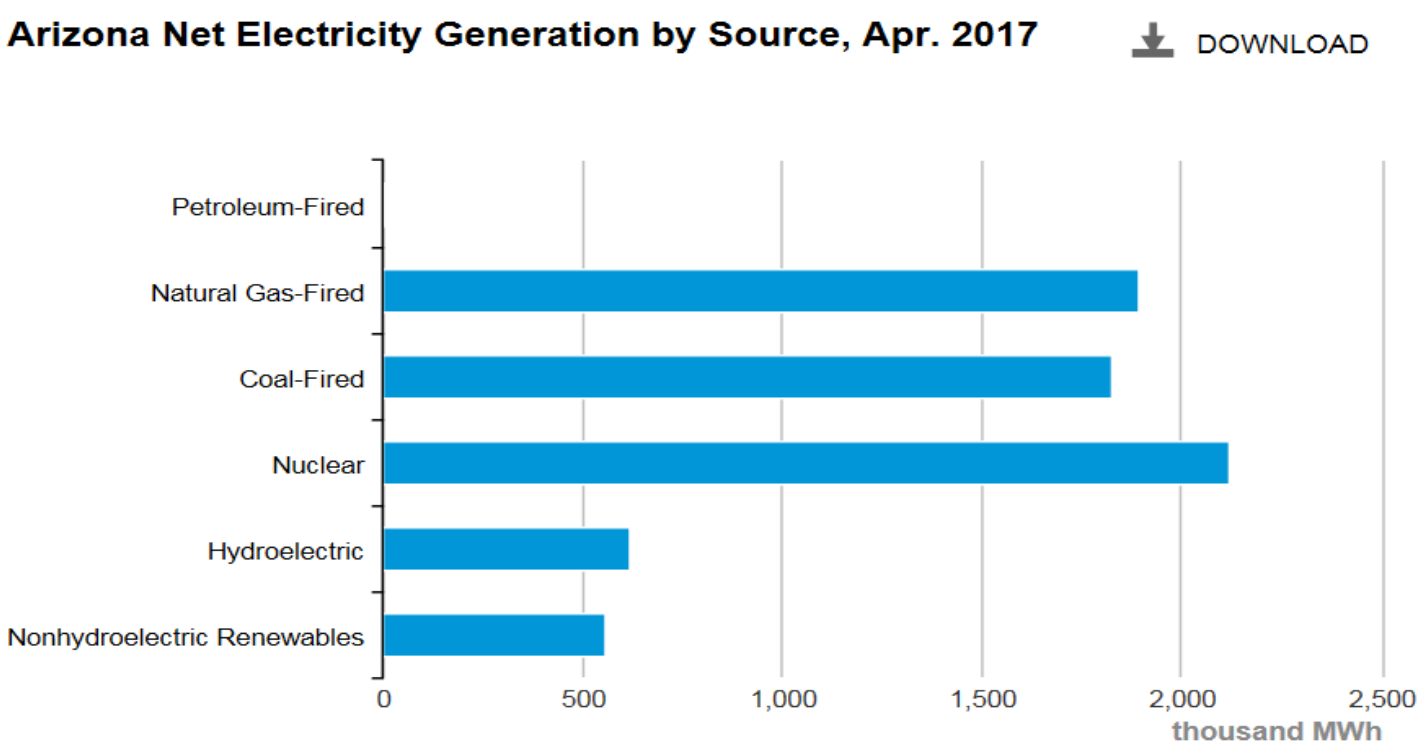
Arizona Energy Production Estimates, 2015

DOWNLOAD



eia Source: Energy Information Administration, State Energy Data System

Renewable Energy



CVP ROOF-TOP (ON-SITE) SOLAR

- **2017- FCV $175M+ located throughout the state**
- **2018 - FCV $222M+ located throughout the state**
- **Keep in mind we value the rooftops systems at 20% of the installed cost, so the value of this year's equipment installed on rooftops would be $222M+ divided by 20% or $1.1B+.**
- **That over a billion dollars of equipment located on rooftops or onsite throughout the state.**

CVP ROOF-TOP (ON-SITE) SOLAR

- **At this time it would be worth it to determine how much electricity is being produced by the on-site systems.**

- **At the time of this writing, the installed cost of solar panels was between $7-$9 per watt: A 5 kW system would cost around $25,000-$35,000. Many utility companies offer incentives, and some subsidize as much as 50% of system costs. Even at half the cost, though, a system that generates an average $75 of electricity per month could take a long time to pay for itself.**

CVP ROOF-TOP (ON-SITE) SOLAR

- **For example: A system that costs $18,000 has a payback period of about 20 years. The cost of a solar panel today is around $3 per watt, and the extra cost of installation brings costs up to $5- $6 per watt. Note: Installation costs for PV systems include both labor and the electronics needed to tie the solar array into your existing electrical system.**

CVP ROOF-TOP (ON-SITE) SOLAR

- **The cost of a solar panel today is around $3 per watt, and the extra cost of installation brings costs up to $5- $6 per watt. Note: Installation costs for PV systems include both labor and the electronics needed to tie the solar array into your existing electrical system.**

- **$1.1B+ divided by $6 = 185,093,410 Watts**
- **185,093,410 Watts divided by 1000 = 185,093 KWs**
- **185,093 KWs divided by 1000 = 185 Megawatts**

CVP

- For 2018 Tax Year, 22 CVP taxpayers are seeking informal review of their values.
- Last Year, 5 Appealed their values to the State Board of Equalization.
- Statutory formulas govern the valuation of all Centrally Valued Properties.
- Full cash value cannot be greater than market value regardless of the method prescribed to determine value for property tax purposes.

CVP

- Most Centrally Valued Properties are in Class 1 and Full Cash Value is the basis for assessing these properties.
- Exceptions are railroads, flight properties and private rail cars which are in Class 5; environmental tech properties in Class 6.05 and non-producing mines in Class 2 all of which do have Limited Values.
- Email to Assessors' Offices with details of Limited Value and Assessment Ratios for these exceptions is sent each November.
    - Centrally Valued Properties valued on the same calendar as Locally Assessed Real Property.

CVP

- CVP Taxpayers File Return Forms with DOR Annually by April 1 or Extended Due Date if an Extension is Requested and Granted.
- Statutes Assume Taxpayers Knowledgeable of Reporting Requirements.
- Assessor Field Staff – Eyes and Ears in the Field
- Can Inform CVP at DOR of New Property ---AND
- Can Provide Taxpayers Contact Information for CVP
- Inform Taxpayers of Availability of Reporting Forms on DOR website: https://www.azdor.gov/Forms/Property.aspx

Thank You!!

References

National Renewable Energy Laboratory (NREL)
http://www.nrel.gov/
Lawrence Berkeley National Laboratory (LBNL)
http://www.lbl.gov/research-areas/energy-technologies/
NARUC – National Association of Regulatory Utility Commissioners
https://www.naruc.org/
Energy + Environmental Economics (E3)
https://ethree.com/
Solar Energy Industries Association (SEIA)
http://www.seia.org/
Google Research
Thanks to Bob Davis, Utah Division of Public Utilities
Grand Canyon State Electric Cooperative Association Inc.
EIA
Houston Chronicle
Shutterstock
http://publicdomainpictures.net